Advanced Imaging LADAR

UTAH STATE UNIVERSITY

CENTER

The Center for Advanced Imaging LADAR was formed to commercialize a now patented camera technique that uniquely combines laser distance measurement with digital color imaging, resulting in detailed, 3-D color images that can be captured in real time and also stored for later analysis and manipulation in virtual reality environments. Civilian and military markets exist for stationary, airborne and spaceborne versions of the technology.

TECHNOLOGY

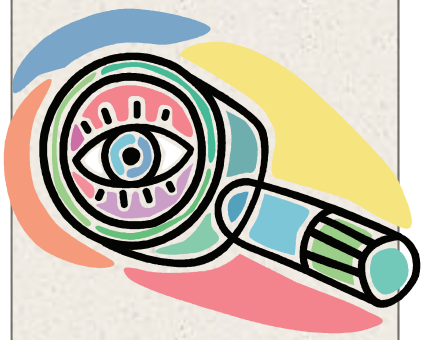
CAIL's technology couples existing 3D LADAR (Laser Detection and Ranging) technology with 2D digital color imaging in the unique 3D Texel Camera. Previously, distance and spectral datasets had to be collected separately, carefully registered, and then superimposed – laborious reprocessing that often required days to weeks. The CAIL technology works in real time – the first system to enable precise 3D color imaging when either the scene, the camera or both are moving.

ACCOMPLISHMENTS

Their key patent issued in December 2003, and a Utah company (RappidMapper, Inc.) is pursuing the manufacturing and marketing of land-based systems while the development of airborne platforms continues.

THINK TANK

What if there was...



A way to take high-resolution 3-D color photos incorporating GPS location data in real time instead of days??

Robert T. Pack
Utah State University
EL-211E
4110 Old Main Hill
Logan, UT 84322-4110
(435)-797-7049
rtpack@cc.usu.edu